AMENDMENT TO THE SPECIFICATION

Please amend the specification as follows:

Please amend paragraph **[058]** to read:

[058] The center of gravity of a person's body is located at approximately lumbar to at or about the height of the navel. The center of rotation as illustrated in FIGs. 16D and 16E passes through the axle **46**. When the socket is placed at a level attitude in relation to the ground with the knee unit at a level position, it is possible to gain as much as 1.5″ in terms of the anterior shifting of the center of gravity in relation to the center of rotation or axle **46**. In dealing with manipulating the weight line passing through the gravity center, when the tilt of the platform is forced to an anterior position, the center of gravity is forced to be in a more anterior or forward position. This[[,]] brings the weight line anterior to the center of rotation or axle **46** by an increase<u>d</u> factor.

Please amend paragraph **[059]** to read:

[059] Raising or lowering the support bar or stop **72** of the knee cage allows the prosthetic knee to flex beyond 180° or less than 180°. When the flexion is beyond 180° or when the anterior slanting position is reached, additional stability is insured. On the other hand, when the flexion is less than 180°, or the posterior

slanting position is accomplished, the controlled position of the knee unit is insured. This condition might be desirable for some patients having extremely long limbs. In the elderly population, and in the majority of the amputee population, increased stability not only becomes desirable for safety, but it is also necessary to insure that these patients do not fall. Some patients have knee flexion contractures. This occurs due to shortening of the ligamental ~~ligemental~~ structures and the tendon structures in their leg, causing the patients to have less than full extension, in terms of their hip flexing muscles. In the invention this condition can be accommodated by adjusting the knee cage in such a way so as to accommodate the knee flexion contracture. The stability of a patient can be maintained by adjusting the ankle of the tibia in relation to the foot. This brings the weight line anterior in relation to the femoral socket or the trans-femoral socket in relation to the center of gravity of the body.

Please amend paragraph **[062]** to read:

[062] The prosthetic knee assembly of the invention is positioned within the cage **110** and consists of a double cylinder arrangement **122** and a control valve-bladder sub-assembly **124**, etc. These elements form a part of an independent ~~from each other a~~ hydraulic system **121** and a pneumatic system **123**. With respect to the connection with the platform **114**, a gas or air cylinder unit **128** and a

hydraulic cylinder unit **126** are arranged tandemly on either side of the axle **146** of the prosthetic knee cage **110**.

Please amend paragraph **[075]** to read:

[075] To summarize the above, [[as]] the kinetic energy generated by the compression of the bladder **132** forces the fluid into the hydraulic chamber **140** and ~~causing~~causes the hydraulic piston **136** to be pushed outward or toward the upper prosthetic limb member. ~~, resulted~~Such action results in the pivotal motion of the platform **114** of the knee cage upward (as illustrated by the arrow B in FIG. 25). This motion places the gas piston **133** into a retracted or downward position, causing compression of the gas in the gas cylinder **128**. Significantly, initially during the downward motion of the piston **133** the gas is pressurized in the gas chamber **139**. This occurs in view of the compressible nature of the gas. As the gas or air is being further compressed, the restrictive forces make it more difficult for the piston **133** to reach the bottom of the gas cylinder **128**, resulted in minimizing the terminal impact. The adjustable bleeding nature of the gas valve **141** positioned at the bottom of the gas cylinder **128** is capable of releasing air in a controlled fashion, and to inhibit the rapid and uncontrolled return of the prosthetic knee and the platform of the knee cage to its most forward or downward position.

In this manner, a resultant damaging force and loud noise are minimized or completely eliminated.

Please amend paragraph **[076]** to read:

[076] The adjustable prosthetic knee cage which was previously described with reference to FIGs. 1-20 is also adaptable for use with the prosthetic knee having an in line piston arrangement. The structure and operation of this prosthetic knee do not form as essential part of the invention and have been disclosed in full detail ~~disclosed~~ by the U.S. patent application S.N 10/278,361 filed October 23, 2002, which this application incorporates by reference. Similar to the prosthetic knee having the dual piston arrangement previously discussed with reference to FIGs. 21-29, as illustrated in FIG. 30 the in line piston arrangement also includes a multi piston structure which is movably connected to the platform **214** of the cage by a single pivot mount **224**, which is situated in the platform **214** posterior to the central axle **246**.

Please amend paragraph **[077]** to read:

[077] In the prosthetic knee having the in line piston arrangement a gas piston cylinder **262** is provided outside the hydraulic cylinder **232**. The bottom of a gas

cylinder **262** is formed with an upwardly facing lip edge **266**. The cap **270** seals the hydraulic cylinder **232** and also traps the gas between that seal and the bottom portion of the concentric gas plunger **272**. A closing cap **228** is provided at the top of the gas cylinder **262**, so as to fixedly receive the piston rod **226** which extends between the pivot mount **224** and the hydraulic piston ~~**234**~~. As the platform **214** of the knee cage is moved downwardly, the piston **234** pushes the hydraulic fluid through the system in a manner discussed hereinabove. In this motion, in view of the permanent connection between the piston rod **226** and the gas cylinder **262**, the gas chamber **268** is also expanded. This is because the gas cylinder **262** moves up and down in relation to a fixedly positioned gas plunger **272, 274** that is mounted on the cap **270** of the hydraulic unit. In this motion the gas volume increases, as the platform **214** is tilted or moved downwardly. In this action more gas enters the chamber **268** between the plunger **272, 274** and the bottom portion **264** of the gas cylinder. When the unit is extended, as a result of the kinetic energy stored in the bladder **250**~~**240**~~, the gas accumulated in the chamber **268** is being compressed. In this manner, as the platform **214** of the cage returns to its normal position, the bottom portion **264** compresses the gas against the plunger **272** and traps gas therebetween. As the distance between the bottom portion **264** and plunger **272** decreases, gas is gradually and substantially pressurized. The pressurized gas slows down the swing phase, damping the

terminal impact. A gas valve **276** is provided at a lower portion of the gas cylinder **260**. As the gas is compressed in the chamber **268**, it is allowed to escape through the valve **276**. During the initial stages of the swing phase, gas is compressed rapidly in the chamber **268** until the pressure reaches a point where it cannot be compressed rapidly. During the slow rate of compression gas is allowed to escape through the valve **276** and therefore damp[[ing]] swing phase. This arrangement minimizes or eliminates terminal impact, so that there is a proper rate of return for the distal portion of the leg. The gas in the form of air is used as a medium because initial compression is easy until the pressure builds up and the last portion of the travel becomes more difficult. This occurs when the maximum amount of damping power is needed just before the leg becomes fully extended, so that it does not advance too rapidly without causing a resultant klunk.

Please amend paragraph **[080]** to read:

[080] Actuation of the cam valve **134** in the prosthetic knee of the invention is associated with at least one of the following three modalities. One mode of operation is mechanical in nature and operates by providing a connector or cable **147** between the prosthetic knee and a movable ankle or foot **119** (see FIG. 21). When the foot is in plantar~~planter~~ flexion or when the ankle position allows plantar~~planter~~ flexion of the foot, the connector or cable **147** pulls on the lever or

arm **145** which locks the cam valve **134** into a closed position preventing flexion of the knee. As the leg is brought into a vertical position, the cam valve **134** is placed into an open position, thereby allowing the flow of fluid from the hydraulic cylinder **126** into the bladder chamber **150**.

Please amend paragraph **[081]** to read:

[081] The prosthetic knee of the invention is also adaptable for operation in the electro-mechanical mode, whereby a switch located on the plantar surface of the foot or the bottom surface of the foot can be activated. Such activation elicits a response from a servo~~surve~~ to pull the arm **145** into a position in which the foot contacts the floor. The cam valve **134~~45~~** is allowed to be placed into a position facilitating the drop of the ball into the seat, so as to seal the unit. Such action prevents flow of the fluid through the prosthetic knee leading to complete stoppage of the flexionability of the knee.